

LaserForm[®] Maraging Steel (B)

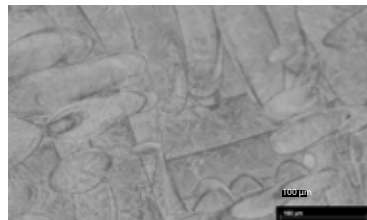
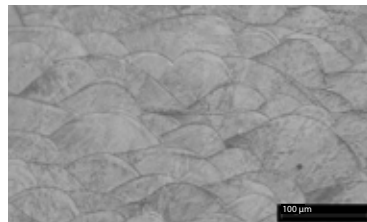
for ProX[®] DMP 200 and 300 Direct Metal Printers

A fine metal powder with properties like 1.2709 for direct production of tools and molds as well as high-performance parts that require high strength and hardness

Chemical Composition

LaserForm Maraging Steel (like 1.2709)

ELEMENT	% OF WEIGHT
Fe	Balance
Ni	17.0 - 19.0
Co	9.0 - 11.0
Mo	4.0 - 6.0
Ti	0.9 - 1.0
Si	≤ 1.0
Mn	≤ 1.0
C	≤ 0.03



As-built very fine microstructure in two perpendicular directions of view

Applications

- Tools and molds for injecting molding, die casting and extrusion
- High-performance industrial parts, e.g. tire manufacturing and automotive
- High-wear components
- Aerospace

Features

- High strength
- Easily heat treatable
- High hardness
- Good corrosion and wear resistance
- Good weldability and machinability

Mechanical Properties¹

	CONDITION	AS-BUILT ²	AFTER POST HEAT TREATMENT ³
Ultimate Tensile Strength, MPa	ASTM E8	1110 ± 50	
Yield Strength, MPa	ASTM E8	860 ± 50	
Elongation at break, %	ASTM E8	11 ± 3	
Hardness		37 ± 2 HRC	55 ± 2 HRC
Density		approx. 100%	

¹ Parts built on a ProX DMP 200 Direct Metal Production Printer

² As-built refers to the state of components built on the ProX DMP 200 Direct Metal Printer before any post processing except removal from the build platform

³ Different post heat treatments might be applied for this type of alloy



www.3dsystems.com

Warranty/Disclaimer: The performance characteristics of these products may vary according to product application, operating conditions, or with end use. 3D Systems makes no warranties of any type, express or implied, including, but not limited to, the warranties of merchantability or fitness for a particular use.

©2017 by 3D Systems, Inc. All rights reserved. Specifications subject to change without notice. 3D Systems, ProX and LaserForm are registered trademarks and the 3D Systems logo is a trademark of 3D Systems, Inc.